REMARKS

In Applicants' response (Amendment "D") filed on June 24, 2004, when claim 1 was transcribed for inclusion in that response, the word "embodying" was inadvertently omitted. The present Amendment restores the word "embodying" to claim 1. This re-insertion of "embodying" in claim 1 is solely editorial, and has not been made for distinguishing claim 1 or any of the claims depending therefrom over the teachings of the prior art of record. For the reasons discussed below, Applicants submit all of the claims in their present form are patentable over the teachings of the art of record, including the references relied upon in the most recent Office Action.

In the November 3, 2004 Office Action, claims 1-4 and 6-24 were rejected under 35 U.S.C. §103(a) as being unpatentable over Silverbrook in view of Phillips et al. This rejection is respectfully traversed for the following reasons.

In the previous Office Action, the Examiner had relied on the Silverbrook reference by itself as a basis for rejecting claims 1-4 and 6-24. Among other reasons for traversing that rejection, Applicants stated in response to that Office Action that the Silverbrook reference did not disclose or suggest the use of a data center, remote from the device that uses a consumable, and therefore none of the method steps or apparatus components for communicating back and forth between such a data center and the device in question were disclosed or suggested in the Silverbrook reference.

In response to these arguments, the Examiner has now relied on the Phillips et al. reference as disclosing a printing device that communicates with a host computer in the context of replacing or replenishing a consumable in the printing device. The Examiner stated it would have been obvious to a person of ordinary skill

at the time the present invention was made to modify the "inventive concept" of Silverbrook to include the device in Phillips et al. that is located remote from the data center, for the purpose of effecting a number of steps in the inventive method.

In response Applicants respectfully submit the Examiner is (still) overlooking many of the factors associated with the Silverbrook reference that are significantly different from the claimed subject matter and that, in the context of an obviousness rejection, would deter or dissuade a person of ordinary skill in the relevant art from modifying the Silverbrook reference, in any manner, in accordance with the teachings of Phillips et al. Moreover, Applicants respectfully submit the Examiner has misinterpreted or over-generalized the teachings of the Phillips et al. reference, and therefore even if the modification of Silverbrook in view of Phillips et al. proposed by the Examiner were made, a method and apparatus as set forth in the claims of the present application still would not result.

First, with regard to the Silverbrook reference, Applicants argued in their June 24, 2004 response not only that the Silverbrook reference failed to disclose the use of a data center remote from the device that uses a consumable product, but also argued that the absence of the use of such a data center in the Silverbrook reference was entirely consistent with the intended purpose of the device disclosed in the Silverbrook publication. The Silverbrook publication is *not* concerned with an automated method, device or system for replacing a consumable printing product. The Silverbrook publication is concerned only with inventory control, and assisting a customer who is seeking to replace a consumable printing component. When this occurs, the user simply notices that replacement of the consumable is necessary,

but there is not detection that is disclosed or suggested anywhere in the Silverbrook reference of the occurrence of an operation to replace a consumable item.

This is why there is no need whatsoever in the Silverbrook reference for the device that uses the consumable to have any capability of communicating with a remote device. The Silverbrook reference is concerned with maintaining the authenticity of replacement consumables in an inventory, but does not recognize, or attempt to deal with, the problem of how to preclude replacement of an unauthorized consumable in the device itself. The Silverbrook reference is concerned with tracking and counting replacement consumables, but does not provide any teachings whatsoever with regard to *preventing* an unauthorized consumable from actually being physically placed into a printing device. The Silverbrook reference discloses a number of measures to counteract or minimize the possibility of counterfeiting or piracy of the replacement consumables, but these measures are accomplished in the Silverbrook reference by inventory control, rather than by any communication between a data center and a printing device. The Silverbrook reference operates based on the assumption that if the inventory control is effective, there simply will not be any pirated or counterfeit replacement consumables that are available for insertion into the printing device. Thus at the time a replacement consumable is actually physically inserted into the Silverbrook reference, there are no steps whatsoever that are undertaken to check the replacement consumable at that particular time, and to prevent its insertion and/or use in the device if it is determined to be not authentic.

The Phillips et al. reference is not at all concerned with inventory control, and merely describes the connection, as a peripheral device, of a printing device, such

as a laser printer, to a host computer. In this sense, the host computer in the Phillips et al. reference would not be considered by a person of ordinary skill in the relevant technology as being a "data center" remote from the printer device. The printer device is merely a peripheral device of the host computer. Applicants recognize, however, that the Examiner is obligated to give every term in a patent claim its broadest reasonable interpretation, but Applicants respectfully submit that even under that guideline, the host computer in the Phillips et al. reference does not and cannot perform the steps, or contain the components, of the claims of the present application. First and foremost, since the host computer and the printer device, although connected by a communication line, are not truly "remote" from each other, there is not and cannot be any protection involved in the Phillips et al. system from the use of an unauthorized consumable item. In a data center that is truly "remote" from the device in which a consumable item will be used, it is possible to generate and store the identification numbers, and the other information associated therewith, in a secure manner, that cannot be manipulated by the user of the device. This is why the independent method and apparatus claims of the present application require the aforementioned communication steps between the remote data center and the device, in order to establish that a consumable replacement item is, in fact, authorized. If the host computer in the Phillips et al. reference were to perform that function, however, it would be a relatively simple manner for a manipulator or tamperer to access the host computer, since it is located in the immediate vicinity of the printer, to enter such false information as may be needed to allow an unauthorized replacement consumable item to be physically placed into the printing device.

Equally as importantly, the Phillips et al. reference is not for the purpose of *preventing* a particular consumable from being used in the printing device that is connected as a peripheral unit to the host computer. The Phillips et al. reference is simply concerned with *conditioning* the replacement consumable, if necessary, that is inserted into the printing device. In this context, as described in the paragraph bridging columns 4 and 5 of the Phillips et al. reference, the replacement consumable can be provided with a memory chip in which usage data of that consumable are stored, and this data can be read at the printing device, and supplied via the communication bus to the host computer. Nevertheless, this information does not *prevent* the replacement consumable from being used, but merely informs the host computer whether steps for conditioning the replacement consumable are necessary.

Therefore, even if the Silverbrook reference were modified in accordance with the teachings of Phillips et al., a method and an arrangement as claimed in the present application still would not result. Equally as importantly, however, Applicants submit a person of ordinary skill in the field of preventing the unauthorized replacement of a consumable item in a device that uses the item would have not basis whatsoever to even consider modifying the Silverbrook reference in accordance with the teachings of Phillips et al. The Silverbrook reference is directed to a printing cartridge insertable into a printing device. The printing device is intended to be handheld and completely portable. If it were necessary to connect that device to a host computer every time a replacement cartridge were inserted in the device, this would destroy the intended and desired portability of the Silverbrook device. It is for this reason that, as discussed above, the device in the Silverbrook

reference has been intentionally designed to control inventory in a completely different manner from having to undertake a check of a consumable item at the time it is inserted into the device. As noted above, in the Silverbrook reference no such check is undertaken at the time a consumable is inserted in the device, since the Silverbrook device operates based on the assumption that, through effective inventory control before the consumable item ever reaches the device, the possibility of counterfeit or pirated replacement consumables being used in the device will be minimized. In this regard, connecting the device disclosed in the Silverbrook reference to a host computer at the time the replacement consumable is inserted into the device would be considered by Silverbrook to be superfluous since, according to Silverbrook, no further protection against pirating or counterfeiting is needed at that time, since all measures for preventing counterfeiting or piracy are, according to Silverbrook undertaken before the replacement consumable ever reaches the device in question.

Applicants therefore respectfully submit that the Examiner not only has proposed a combination that, if made, would not be comparable to the method or apparatus claimed in the present application, but also the Examiner has not provided persuasive evidentiary support as to why a person of ordinary skill in the relevant field would be motivated to make the modification proposed by the Examiner, as is required to justify a rejection under 35 U.S.C. §103(a).

All claims of the application are therefore submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested.

Submitted by,

Steven H. Noll (Reg. 28,982)

SCHIFF, HARDIN LLP
CUSTOMER NO. 26574
Patent Department
6600 Sears Tower
233 South Wacker Drive
Chicago, Illinois 60606
Telephone: 312/258-5790
Attorneys for Applicants.

CH1\ 4217115.1